

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.-28. (Canceled)

29. (Currently Amended) A method for identifying a compound that modulates the activity of a human c-Maf protein, comprising

providing an indicator cell that comprises a recombinant expression vector encoding a human c-Maf protein of SEQ ID NO.:2, wherein the human c-Maf-coding sequences are operatively linked to regulatory sequences that allow for constitutive expression of human c-Maf in the indicator cell, and a reporter gene responsive to the human c-Maf protein;

contacting the indicator composition with a test compound; and

determining the effect of the test compound on the activity of the human c-Maf protein in the indicator cell wherein the step of determining comprises evaluating the expression of the reporter gene in the presence and absence of the test compound, to thereby identify a compound that modulates the activity of a human c-Maf protein.

30.-31. (Canceled)

32. (Currently Amended) A method for identifying a compound that modulates an immune response, comprising

providing an indicator cell that comprises a recombinant expression vector encoding a human c-Maf protein of SEQ ID NO.:2, wherein the human c-Maf-coding sequences are operatively linked to regulatory sequences that allow for constitutive expression of human c-Maf in the indicator cell, and a Th2-associated cytokine gene responsive to the human c-Maf protein;

contacting the indicator composition with a test compound; and

determining the effect of the test compound on an immune response, wherein the step of determining comprises evaluating the effect of the compound on expression of the Th2-associated cytokine gene in the presence and the absence of the test compound, to thereby identify a compound that modulates an immune response.

33-34. (Canceled)

35. (Previously Presented) The method of claim 29 or 32, wherein the reporter gene is operatively linked to regulatory sequences of a Th2-associated cytokine gene.

36. (Canceled)

37. (Currently Amended) The method of claim 29 or 32 34, wherein the human c-Maf coding sequences are operatively linked to regulatory sequences of the endogenous human c-Maf gene, wherein the regulatory sequences of the endogenous human c-Maf gene comprise the untranslated sequences of the NheI/XbaI fragment of pHu-c-Maf (ATCC Accession No. 98671).

38. (Previously Presented) The method of claim 29, wherein the reporter gene is a Th2-associated cytokine.

39. (Previously Presented) The method of claim 32 or 38, wherein the Th2-associated cytokine is interleukin-4.

40. (Previously Presented) The method of claim 29, wherein the reporter gene comprises nucleotides -157 to +58 relative to the +1 start site of transcription of the interleukin-4 gene.

41. (Previously Presented) The method of claim 29, wherein the reporter gene comprises about 3 kb of upstream regulatory sequences of the interleukin-4 gene.

42. (Previously Presented) The method of claim 29, wherein the reporter gene is selected from the group consisting of genes that encode: chloramphenicol acetyltransferase, beta-galactosidase, alkaline phosphatase and luciferase.

43. (Previously Presented) The method of claim 29, wherein the indicator cell does not normally express human c-Maf.

44. (Previously Presented) The method of claim 29, wherein the indicator cell is a B cell.

45. (Previously Presented) The method of claim 44, wherein the indicator cell is a M12 B lymphoma cell.

46. (Previously Presented) The method of claim 29, wherein the indicator cell is a Th1 cell clone.

47. (Previously Presented) The method of claim 46, wherein the indicator cell is an AE7 cells.

48. (Previously Presented) The method of claim 29, wherein the indicator cell is a nonlymphoid cell.

49. (Previously Presented) The method of claim 48, wherein the indicator cell is a HEPG2 hepatoma cell.

50. (Previously Presented) The method of claim 48, wherein the indicator cell is a yeast cell.

51. (Previously Presented) The method of claim 32, wherein the effect of the test compound on an immune response is determined by determining the effect of the compound on production of a Th2-associated cytokine protein.

52. (Previously Presented) The method of claim 51, wherein the Th2-associated cytokine gene is an interleukin-4 gene.

53. (Previously Presented) The method of claim 32, wherein the effect of the test compound on the expression of a Th2-associated cytokine gene is determined by determining the effect of the compound on the development of T helper type 1 (Th1) cells.

54. (Previously Presented) The method of claim 32, wherein the effect of the test compound on the expression of a Th2-associated cytokine gene is determined by determining the effect of the compound on the development of T helper type 2 (Th2) cells.

55.-56. (Canceled)

57. (Currently Amended) A method for identifying a compound that modulates the activity of a human c-Maf protein comprising,

providing an indicator cell comprising a recombinant expression vector encoding a human c-Maf protein comprising the NheI/XbaI fragment of pHu-c-Maf (ATCC Accession No. 98671), , wherein the human c-Maf-coding sequences are operatively linked to regulatory sequences that allow for constitutive expression of human c-Maf in the indicator cell, and a cytokine gene responsive to the human c-Maf protein,

contacting the indicator cell with ~~the~~ a test compound, and

determining the effect of the test compound on human c-Maf activity by evaluating the level of cytokine production in the indicator cell in the presence and absence of the test compound, wherein a modulation of the level of cytokine production identifies the test compound as a modulator of the activity of a human c-Maf protein.

58. (Previously Presented) The method of claim 57, wherein the level of cytokine production is determined by detecting cytokine mRNA in the indicator cell.

59. (Previously Presented) The method of claim 57, wherein the level of cytokine production is determined by detecting cytokine secretion into the culture supernatant.

60. (Previously Presented) The method of claim 57, wherein the cytokine is interleukin-4.